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East Europe Report

ECONOMIC AND INDUSTRIAL AFFAIRS

No. 2457

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DEPUTY MINISTER VIEWS LABOR REMUNERATION, OTHER PROBLEMS

Bratislava NOVE SLOVO in Slovak 4 Aug 83 pp 1, 4

[Interview with Eng Premysl Tomasek, deputy of the CSSR, Ministry of Labor and Social Affairs, by Jaroslav Hejkal and Alena Walekova: "The Golden Assets of our Economy"; date and place not specified]

[Text] We have entered the second half of the Seventh 5-Year Plan. The first half left us with many experiences and results of implementing the principles of the improved system of management while the second half leads to other new tasks.

Based on evaluation of actual resources and the needs for manpower, it was estimated even 2 years ago that by the end of the 5-year plan at most 160,000 workers would be added to our national economy. According to current trends and indicators for the future, it is now estimated that the figure will be exceeded by 100,000 to 150,000 workers by the end of the 5-year plan. The critical resource is our youth. Over 1.1 million young people should enter the working process during this 5-year plan. Naturally, the greater increase in the labor force need not be detrimental to the interests and needs of the national economy. After all, the creation of new social values, especially national income, is influenced not only by increased performance and labor productivity but also by increased manpower. Of course this assumes that the workers will be distributed in accordance with economic interests. It is simply a matter of people working wherever they bring the greatest social benefits. In no case, however, in connection with the greater increase of workers, must we tolerate indifference toward the development of labor productivity, the growth of which has a declining tendency here. We cannot allow ourselves in any way to lag behind world developments in this area, even if the number of workers were even greater.

It was precisely with these considerations in mind that we developed our interview with Comrade Premysl Tomasek, first deputy of The Labor and Social Affairs Ministry of the CSSR.

[Question] We believe that the way to higher labor productivity among us, too, is through opportunities for higher earnings of the people. After all, this is consistent with the Set of Measures. Is the planned wage development consistent with this in the current 5-year plan?

[Answer] In every economy that is developing along healthy lines the development of monetary income, including wages, must be consistent with the creation of new resources. If our prospects of economic growth are more limited these years, then the development of wages must also adapt to this, otherwise we would set off an unhealthy inflationary spiral. At the same time, however, nothing should prevent the growth of wages at a faster rate in certain plants under certain conditions.

[Question] Under what conditions? Could you be more specific? (Can you give people an idea of how to attain higher wages regardless of the kind of labor-saving developments you spoke about?)

[Answer] There are several possibilities. First of all, there is the possibility of providing for higher tasks through counterplanning and, thereby, also higher wages. Another way to higher earnings is through a greater share of technically advanced products and products of first quality which are given preference in wholesale pricing and also through more effective exchange of our products on foreign markets. And, finally, another opportunity for real wage increases is provided through more efficient utilization of manpower resources. Current regulations in production branches permit any wage assets obtained through absolute savings of manpower to be used without restriction to increase the average wages of those workers who earned them.

[Question] This opportunity, however, has existed here for more than a year and still it is not used often enough. It appears to us that the reason is not that people would not want to get higher wages by doing better work but some entirely other reason...

[Answer] I agree, there are actually several reasons why this administrative principle is not applied. First, there is the fear of management personnel that is speeding up the rate of production or after a structural change which would require more labor input for production it would be very hard to get back the released manpower. In addition, they are afraid of the relatively low stability of management tools--that a lower number of workers attained in a given year would become the basis for the next year and so the savings would actually be wiped out. It is a question of honorable and correct relations of higher management bodies and their enterprises or plants. We reject any stratagems whereby greater tasks achieved through counterplanning are then later changed by someone and deprived of their value by designating them as the starting base for the economic plan. It is true that a big drawback is also the procedure of those managerial personnel who do not have the courage or integrity to rid themselves of mediocre and unproductive workers. In these matters there can be no conciliation, no justification for shortcomings or an exaggerated policy of social appeasement. Even if the solution is not simple and may bring about a conflicting situation, there is no other way out but to deny any benefits to those whose work does not deserve them.

[Question] We have already touched on the problem of differentiation in remuneration.

[Answer] One of the main tasks of wage policies today is applying the principle of merit and appropriate differentiation in matters of remuneration. Persisting in positions of egalitarianism is harmful to the interests of society because it debases the labor of honest and productive workers. Unfortunately, eliminating unfair uniformity in wage compensation is proceeding slowly...

[Question] In your opinion, what should be the difference between the highest and lowest wage?

[Answer] There is no simple answer, because, on the one hand, there is the approved wage rate reflecting qualification for the job and, on the other hand, the actual productivity of each individual. In the labor wage scale system the difference between the most simple job and the most complex functions is approximately fivefold and in the case of technical-industrial workers [THP], approximately sevenfold. This base rate is influenced by the fulfillment or nonfullment of tasks: those who exceed norms and deliver quality work can attain 30 to 50 percent beyond their pay scale and in the mining branches even more.

[Question] This means that there already are regulations allowing for wage differentiation. What then, is the main problem?

[Answer] The problem is that most work done by laborers is concentrated in the 4th to 6th classes and that done by THP is in the 8th to 12th classes, so that the differences are reduced to a ratio of about 1:1.5. But the biggest stumbling block is mainly the fact that differences in compensation for work do not take into account the actual results achieved, so that differences among workers of the same class, even though their productivity may be substantially different, is only around 10 to 15 percent. But everyone knows that real differences in the abilities and productivity of people are much greater. In my opinion, the differences between the least and the highest qualified workers should generally be five- to sevenfold and in productivity of individuals--of the same class--approximately twofold.

[Question] The regulations of the Set of Measures, however, are not, in themselves, adequate for this. There should be a system in the enterprise subdivisions which would make a fair differentiation possible. Specifically, we have in mind khozraschet and its operation.

[Answer] Of course, implementing khozraschet down to the individual jobsite is still in its infancy here. At the same time, many managers are relieving this situation by extensive explanations of enterprise tasks at meetings and conferences; they overlook the fact that operational proceedings at production meetings is one thing and operation of khozraschet is another matter. The intent of khozraschet is to work at all levels according to previously determined calculations, in accordance with the budget. In other words, khozraschet in its results is nothing more than determining expenses on one side, and expected returns on the other. The result then is the economic effect in which the collectives are to have a commensurate monetary stake depending on what part of this effect they actually earned.

[Question] In your opinion, how should we go about introducing khozraschet in enterprises?

[Answer] It is important to work out the regulations of enterprise subdivision khozraschet. This requires preparing and integrating systems of enterprise subdivision planning, records and costs, including the system of monetary incentives. The idea is to set up clear tasks in performance and management at every worksite and give firm guarantees in advance on how the individual collectives will share in the wages.

[Question] It seems to us that setting up brigade forms of organizing work is proceeding slowly here. What do you think is the reason?

[Answer] Every new form runs up against certain obstacles and misunderstandings at the beginning and brigade forms of work and remuneration are no exception. For example, there are fears that the role of the master workman or shop foreman will be reduced, that collective distribution will lead to subjectivism or that the transition to collective remuneration will restrict the productivity of individuals. Such uncertainty obviously must be headed off in advance. The intent of the brigade forms is primarily to create good conditions for the smooth flow of work. The brigade must know its tasks, rights and responsibilities. It must be rewarded for the work results achieved directly through its efforts. It should derive material benefits for good results, of course, but also bear material responsibility for lack of success. Last year we issued the necessary instructions for these new forms here. We feel that any kind of rashness or simplistic approach could nip in the bud the proper concepts. Consequently, it was decided to first check out the brigade forms and determine further procedures on the basis of these experiences. Our ministry will effectively support these forms.

[Question] But this calls for proper norms and standardization of work?

[Answer] Of course, work norms in the broad grouping of technical-intustrial norms have an exceptional status because they directly affect people's earnings. They determine working and technological procedures and use of time, which are essential for the accomplishment of designated tasks. The expansion of basic norms and particularly their standardization are not contrary to the people's interests and will not at all reduce wage levels. It is a fair gauge of work for remuneration, for eliminating the harmful philosophy of well and poorly paid work. With norms we cannot retain outdated technology and working procedures long outlived, because that is the way back which harms not only the interests of society but also of every individual. Whoever works according to progressive norms will not and must not have any ceilings or restrictions on his performance or his earnings potential.

[Question] Many people, however, do not consider their work to be measurable, for example, those in administration.

[Answer] Standardization of work has a long tradition with us, especially in the area of performance norms. However, there is still much due to those

in the sphere of service, management and auxilliary work and so-called routing work--in administration. Here, however, except for isolated cases, we work without norms and, therefore, many workers often develop without restraint. So it is urgent to also include, by means of norms, the many workers in these sectors. This involves particularly workers in financial, material and wage accounting offices, in national economic record offices, in personnel agenda, etc. No one wants to set norms for the use of time by a scientific worker, for example, or in activity where the work literally changes constantly. This does not mean that we should not set norms wherever the amount of work can be determined in advance. The sooner we do this the more we will contribute to the growth of productivity and more reliably measure compensation for work performed.

[Question] It seems to us that even the efforts underway in research and development [R&D] must be better reflected in wage policies...

[Answer] I agree. Accelerating results of R&D is one of the key problems of our economy. So it is our responsibility to create conditions so that technical progress will have the green light everywhere. This will require certain changes in the management and planning of R&D, a more flexible approach to fiscal, price and wage policies. Finally, the Eighth Plenum of the CPCZ Central Committee in its conclusions opened the way for adopting effective measures which will create conditions favorable to accelerating the application of R&D results in practice. I have in mind also more efficient use of qualified workers in key sectors of R&D, clearly assuring them of living and working prospects. It would help matters if the wage mechanism would give greater preference than now to organizations which produce technically advanced products and products of first quality and, conversely, restrict possibilities of wage increases in organizations which produce obsolete or third-rate products. The objective is to strengthen the movable wage component of overall compensation for work and link it with the final input of technical development. This also means greater appreciation for productive and highly qualified workers in science and R&D and those who come up with new ideas. In short, the wage policy must help science, new techniques and technology to become the real motive power behind social progress.

[Question] Naturally, this will also influence the structure of our manpower resources. Let us take, for example, the robotization of our national economy. It appears that this is not only a technical and economic task but also a social problem.

[Answer] The prognosis of long-range development of the structure of manpower and the character of work takes into account inevitable changes, the results of which mean not only new challenges for the production of this equipment but also for operating it competently. It is expected, for example, that in fully automated assemblies, work traditionally done by laborers will be done by qualified secondary school and college graduates. Consequently, wage and social policies will also react to this process and, naturally, there will also be appropriate adjustments in working procedures.

[Question] Robotization, like the above-mentioned forms of increasing work efficiency, will result in a reduced number of workers in our national economy. How can this task be carried out and retain the legal right to work?

[Answer] Our constitution gives every citizen the right to a job and fair remuneration for it. This is a great advantage and achievement of the socialist social system compared with workers' rights in capitalist countries. Members of the older generation still remember the time when many could not find work or lost their jobs. From official documents of the bourgeois republic it is known that, for example, in the 1930s there were 970,000 persons here who were unemployed. Now, however, no one has to worry about a job. We have many places in the national economy where there is a demonstrable shortage of workers. We also have places where work activity has had only a small effect, where performance and labor productivity are on a low level. Our problem is to make effective use of every worker as a real golden asset of our economy. If, then, one speaks of reducing labor in certain sectors that does not mean that the released workers would be without jobs, but rather that everyone work according to his abilities and knowledge wherever the interests of society require.

[Question] Lately it is being said, in connection with the requirement for employing all graduates of training centers, technical and advanced schools, that it is necessary to reduce the employment of pensioners.

[Answer] Our society is concerned that those persons who have become legally eligible for a pension but are still capable of activity contributing to task fulfillment should continue to work. It is important, though, that they work where the interests and needs of society determine. The help of older workers is still welcome, especially in production and the services. As concerns administration, one must proceed very cautiously here. Naturally, outstanding employees in various sectors of the national economy should have the opportunity to work and pass on their experiences. I am convinced that these problems will be properly resolved in a short time.

[Question] Improving management has certainly brought about many favorable results in the first half of the Seventh 5-Year Plan. However, great problems arise in those enterprises where implementation of the principles of the Set of Measures calls for personnel changes.

[Answer] Actually, there are some places where the workers are no longer equal to their tasks. They lack any normal ambition and especially a creative approach toward resolving new and certain more challenging tasks. In such cases, gradual personnel changes are essential if we do not want to devalue the proper ideas and objectives of the improved system of planned management. We consider the principle of continuity and stability in management as an important and positive principle. But that does not mean that those persons who are no longer adequate for their work should remain permanently in their positions. This is not any earth-shaking matter, rather a practical and planned adjustment in workers. In making decisions about these kinds of problems, one must not let bonds of old friendship stand in the way. Responsible employees must have the courage to clear the way for creative and productive people who guarantee that they will fully serve the interests of our society.

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GOVERNMENT MEASURES FOR PENALIZING LOW QUALITY DISCUSSED

Prague FINANCE A UVER in Czech No 6, 1983 pp 415-425

[Article by Eng Ladislav Benes: "CSSR Government Measure for Penalizing Low-Quality Production Beginning 1983"]

[Text] Low-quality production has been penalized since 1979. Penalties are part of the quality-control system. They supplement other economic tools which affect the quality of production in two directions: on the one hand, they stimulate deliveries of quality products, while, on the other hand, they penalize deliveries of low-quality products. Among them is the setting of higher prices for products included, on the basis of evaluation, in quality class 1, and of lower prices for products included, on the basis of evaluation, in quality class 3, and financial incentives based on them. Penalizing low-quality production focuses on the regulation of wages payable, on remuneration of management personnel and other workers, and on the allocations to the cultural and social services fund. Penalizing low-quality production applies also to the evaluation of plan fulfillment and to the evaluation of organizations' economic results.

The purpose of penalizing low-quality production is exerting bigger pressure to reduce the volume of this production, because the amounts representing the total losses from low-quality production are reflected as sanctions in certain indicators of the organization's economic activity and thus affect its plan fulfillment, economic results and financial incentives. In other words, these are deliberate additional sanctions which supplement the primary negative effect of these losses on the organizations' economic results.

The correctness of this intention has been fully confirmed by the experiences with the application of individual tools of quality control. They make it clear that the tools of stimulative nature work very well and are effective. On the other hand, the tools in the category of sanctions are not very effective. Thus, the preferential pricing for the products included, on the basis of evaluation, in the quality class 1 amounted to Kcs 1,508,000,000 (or approximately 43 percent of the total amount of preferential pricing) in 1981 and increased approximately sixfold since 1977. On the other hand, the punitive price reduction for the products

included, on the basis of evaluation, in the quality class 3 amounted to only Kcs 117 million (that is, approximately 97 percent of the total amount of punitive price reduction) and increased by a little more than one-third since 1977.

Penalties for low-quality production were set in the instructions for penalizing low-quality production issued in 1978 jointly by the State Planning Commission, Federal Ministry of Finance, Federal Ministry of Labor and Social Affairs, Federal Ministry of Technological and Investment Development, and Federal Office of Statistics. The instructions were published in No 11/1978 of FINANCNI ZPRAVODAJ and supplemented by explanations in No 9/1979 and No 6/1980 of the same periodical.

With reference to the existing regulations (the Economic Code, Civil Code and other), the instructions defined the amounts reflecting the losses from low-quality production and the manner in which they are to be recorded on the accounts and in financial statements of organizations. The instructions furthermore described the procedure for application of these amounts as sanctions in financial incentives and in the evaluation of the plan fulfillment and economic results of organizations. The instructions specified the group of organizations to which the penalties for low-quality production applied, various tasks of central agencies in making these penalties effective, the procedures for alleviating the harshness of penalties and so on.

Only the external losses originating outside the production organization were included in the losses from low-quality production in 1979. Beginning 1980, the losses from internal rejects above the permissible limit began to be included in these losses.

Amount of Losses from Low-quality Production

The introduction of penalties for losses from low-quality production contributed in the first place to the fact that these losses began to be ascertained by a uniform method in all production organizations. This makes it possible to follow and evaluate the development of these losses for the entire national economy as well as by individual central agencies, economic production units [VHJ] and enterprises, and to mutually compare these losses among the organizations. On this basis conclusions can be drawn on the volume and trend in low quality production and on the effectiveness of measures designed to reduce it.

The losses from low-quality production in the group of organizations surveyed amounted to Kcs 1.09 billion (0.166 percent of output) in 1980, declined to Kcs 923 million (0.125 percent of output) in 1980 and further declined to Kcs 790 million (0.10 percent of output) in 1981. This reduction reflects certain methodological changes in following up the losses from low-quality production (for example, exclusion of the sales tax on spare parts used in the repairs covered by warranty, and of losses from shipments between the concern organizations when a concern is set up), but largely the measures which the organizations, due to the penalties for low-quality production, had already taken.

The losses from low-quality production considerably vary between individual sectors and branches which is primarily due to the nature of products and production technologies, but partly also to the attention paid to the quality of production by the supervisory central organs and economic production units. The largest ratio of losses from low-quality production is in the organizationsl managed by the federal agencies (0.294 percent in 1979, 0.180 percent in 1980 and 0.124 percent of the output in 1981) and somewhat lower in the organizations managed by the central agencies of the republics (in the CSR 0.067 percent in 1979, 0.070 percent in 1980 and 0.068 percent of the output in 1981; in the SSR 0.072 percent in 1979, 0.091 percent in 1980 and 0.089 percent of the output in 1981).

Even bigger are the differences between individual central agencies. In 1981, the losses from low-quality production were 0.315 percent of output in the organizations of the Federal Ministry of General Engineering, 0.120 percent of output in the organizations of the Federal Ministry of Electrotechnical Industry, 0.080 percent of output in the organizations of the CSR Ministry of Industry and 0.102 percent in the organizations of the SSR Ministry of Industry.

Reporting the losses from low-quality production makes possible their comparison in similar groups of organizations. In addition to the above data for the CSR and SSR ministries of industry, we can quote the data on industrial production for the CSR Ministry of Construction (0.060 percent of output), SSR Ministry of Construction (0.014 percent of output), CSR food industry (0.037 percent of output), SSR food industry (0.041 percent of output), CSR production cooperatives (0.508 percent of output) and SSR production cooperatives (0.034 percent of output).

Generally speaking, the relatively smaller losses from low-quality production are in the organizations manufacturing the means of production than in the organizations manufacturing consumer goods. There is a question about why this is so--more demanding customers or greater attention paid to the quality of products in the production organizations involved.

It is interesting to compare the total losses from low-quality production with the losses from internal rejects in two selected VHJ manufacturing the means of production and two selected VHJ manufacturing consumer goods. The first VHJ manufacturing the means of production reported total losses from low-quality production amounting to 0.08 percent of output and losses from internal rejects amounting to 0.88 percent of merchandise production, the second VHJ 0.13 percent of output and 0.67 percent of merchandise production, respectively. The first VHJ manufacturing consumer goods reported total losses from low-quality production amounting to 1.79 percent of output and losses from internal rejects amounting only to 0.75 percent of merchandise production, and the second VHJ 0.16 percent of output and 0.54 percent of merchandise production, respectively. These data mirror the quality of production in the VHJ involved. Big losses from low-quality production arise, where there is no adequate quality control during the production process and prior to the shipping of products

from the organizations, which is reflected in the relatively small losses from internal rejects. Shipping products of inferior quality to customers results in many complaints by them and ultimately in big losses from low-quality production in the production organization. This is socially much more harmful than bigger losses from internal rejects reflecting poor work caught in the production organizations.

The biggest differences in the losses from low-quality production are between individual VHJ and enterprises. While on the average these losses are relatively small, there are a few VHJ and enterprises in which these losses are many times above the average. One VHJ reported losses from low-quality production amounting to 1.79 percent of output caused by the losses in its three enterprises (5.93 percent, 3.76 percent, 3.70 percent).

As already stated above, the losses from low-quality production were generally reduced in 1981 in comparison with 1979. The most significant decline took place in VHJ and enterprises which registered the biggest losses from low-quality production in 1979. This bears witness to the effectiveness of penalties for low-quality production despite the relatively brief period of their application.

Experiences with Penalties for Low-Quality Production

The instructions for penalizing low-quality production were fully applied actually in industrial organizations only. They were directly linked to the conventional follow up of losses from the external and internal rejects and cost of complaints. They were implemented in other production sectors only partly (for example, in construction losses from low-quality production did not include small backlogs) or not at all (for example, in transportation, communications and agricultural production). The appropriate central agencies have not defined what should be regarded as low-quality production in these sectors. Because of the special nature of their operations, the criteria effective for industrial enterprises cannot be applied in these organizations.

Penalties for low-quality production were introduced in combination with the new systems of quality control. Consistent application of penalties to a certain extent depends on the degree to which these systems were introduced as well as on their standards. It depends upon the quality of personnel of the quality-control departments, the quality and efficiency of their work, the scope and consistency in finding and catching low-quality products and so on. Although the quality-control systems began to be set up in the central agencies, VHJ and enterprises at the beginning of the 1970's, they have not been sufficiently effective everywhere in increasing production quality and reducing low-quality production. The setting up of the quality control system has sometimes been delayed because some serious problems have not been solved. The formation and effectiveness of these systems considerably varies in individual organizations. This is also one of the reasons why the losses from low-quality production are not determined correctly and completely in some organizations, their causes are not analyzed, the measures designed to eliminate the existing shortcomings are not effective or these measures are not consistently implemented.

The application of penalties for low-quality production has confirmed that the customers inconsistently claim their lawful rights when they receive low-quality products. This is particularly true of the organizations receiving goods for manufacturing consumption. The complaints about low-quality production are more consistently filed by the customers of consumer goods among the general population (here, according to the opinion of production organizations, this lawful right is sometimes abused). It is, therefore, desirable that the organizations make full use of their rights. A new supplement to the Economic Code effective 1983 should contribute to it: if the customer fails to exact punitive damages from his supplier and economic arbitration finds out about it, both the customer and his supplier must pay an equal sum corresponding to the amount of unpaid damages to the state budget.

A number of problems with penalizing low-quality production existed in providing warranties which were solved only when the penalties were introduced. This was particularly true of the periods covered by warranties, warranties in export shipments and warranties on domestic shipments of consumer goods where the warranty period was extended.

The basic warranty period is 6 months unless it is extended by another regulation (such as basic terms of delivery of some products). The warranty period for consumer goods usually exceeds 6 months and is explicitly stated on the product itself, package or enclosed warranty.

According to the instructions for penalizing low-quality production, the losses from low-quality production comprised all cost of repairs during the warranty period which were reduced by the amount resulting from the extended warranties according to the agreements between organizations or according to the unilateral declaration of the supplier. The purpose of these instructions was to favor the organizations which voluntarily extended the basic warranty period.

It must be stated that there is no full agreement in the regulations on the warranty periods between the deliveries of end products and deliveries of materials, component parts, purchased products and subdeliveries necessary for the final shipments. The basic warranty period of 6 months in these deliveries does not cover the period necessary for the manufacture and shipment of the last product. The end supplier, therefore, cannot file a complaint with his suppliers for the defects in their products which were discovered by his customer because the warranty period has already expired in the meantime. For this reason, the penalty is relatively harsher for him than for his suppliers. This problem most frequently arises in engineering enterprises and in connection with the export shipments. The Economic Code does not specify a warranty period for export shipments and the foreign trade organizations offer it in accordance with the usages and conditions on the foreign market in question. This warranty period usually exceeds the basic 6-month period (it is sometimes extended to 2-3 years by the supplier to the production organization--exporter).

This problem can be solved in several ways. In the first place, the suppliers should more willingly extend the warranty periods by agreement or unilaterally, particularly if these periods are extended for the end supplier by the generally applicable regulation. It is advantageous for them because the costs of repairs during these extended warranty periods are not included in the losses from low-quality production. Furthermore, central agencies were instructed to verify from this standpoint the length of the warranty period in the basic delivery terms issued by them and eventually to extend it. Finally, the end suppliers should claim bigger damages against their suppliers for defective products after the warranty period has expired. These damages reduce their losses from low-quality production and they must be interested in them.

In export shipments, a lump sum is sometimes offered instead of a warranty covering a certain period. Its terms often are not sufficiently specified between the production organization and foreign trade organization [OZO] so that it sometimes also covers items which have nothing in common with the quality of the product. The OZO were, therefore, instructed to clarify with the production organizations by 31 December 1980 the details of this lump-sum offer and earmarked an amount for the planned services to the customers (service) which was not to be included in losses from low-quality production. Prior to this arrangement, it was possible to reduce--for the purposes of calculation of losses from low-quality production--these warranty lump sums by an amount earmarked for the planned services to the customers in a ratio specified for individual VHJ by the supervisory central organ.

Rather long (up to 5 years) warranty periods are specified for some types of consumer goods which, in the opinion of the production enterprises concerned, causes them too big losses from low-quality production. It has turned out, however, that this is not the principal cause and that the problem lies rather in the defective design of products or technology of their manufacture, waste and inadequate checks on the repairs carried out under the warranty, in the insufficient verification of complaints and so on. Thus, instructions were issued to reexamine the expediency of particularly long warranty periods, amounts calculated in the price of products for repairs under warranty and amounts of lump sums offered to the repair enterprises for repairs under warranty.

Losses from internal rejects which exceed the stipulated permissible limit have been included in the losses from low-quality production since 1980. This measure, however, has not been sufficiently effective in reducing these losses because the sectorial central agencies set the permissible limit so high that the actual losses, with a few exceptions, are below, and in some instances in fact very much below, this limit. For this reason, the CSSR Government decided that this permissible limit must be set below the actual level of losses from internal rejects in 1979.

As a reaction to the penalization of low-quality production, the demand was expressed that a reasonable limit should be set also for the losses caused by external rejects or for the sum of losses from low-quality production. In support of this proposal, it was stated that every production is accompanied with certain losses objectively caused by the technology used, level of productive forces and so on. This proposal was carefully discussed and finally it was decided to apply this permissible limit not generally, but only in some sectors and instances as well-founded exceptions. As the above-mentioned experiences with the introduction of the permissible limit for losses from internal rejects, a general application of such a permissible limit would undermine the effect of penalties for low-quality production. Setting such a limit would also be problematic because we do not have yet at our disposal sufficiently verified and objective material which is technically and statistically documented. Moreover, the introduction of such a limit would involve a considerable amount of paper work.

Penalties for low-quality production are not properly worked out by the organizations either for the area of personal financial incentives (premiums, bonuses and shares in economic results) or for individual departments within the enterprise khozraschet, and are not applied to the workers responsible for losses from low-quality production.

Penalties for low-quality production are adequate to the incurred losses. Average penalties in most organizations are light because the average share of these losses in output is small. On the other hand, in a small group of enterprises reporting excessively high losses, these penalties are rather heavy and in some of them they border on harshness. The effect of low-quality production is most extensive on the amount of wages payable and annual bonuses for management personnel. Allocations to the cultural and social services fund and development fund were also curtailed.

The guidelines on penalizing low-quality production anticipated the possibility of tempering harsh penalties in exceptional instances. Five central agencies submitted applications for thie purpose on behalf of 31 enterprises in 1980. The applications were settled favorably for 27 enterprises by subjecting to penalties only the losses from low-quality production exceeding their actual amount in 1979 which was reduced by a specified ratio (10-15 percent). In 1981, 4 central agencies submitted applications on behalf of 26 enterprises, 19 of which were complied with.

On the basis of evaluation of effectiveness of instructions for penalizing low-quality production for 1979, CSSR Government Resolution No 383/1980 set the tasks which secured a consistent application of penalties beginning 1981.

Changes in Penalties Beginning 1983

Experiences in 1979 and 1980 confirmed the expedience of application of penalties for low-quality production, and the Set of Measures for Improving the Planned Management System of National Economy after 1980, therefore,

ordered the penalties for low-quality production to be incorporated in our legal system. This occurred effective 1 January 1983 by CSSR Government Measure No 116/1982 of SBIRKA on achieving and further increasing the quality of production and similar economic activity. In its Resolution No 253/1982, by which it approved the above measure, the CSSR Government set additional tasks for making the penalties for low-quality production effective. The 1976 instructions for penalizing low-quality production were rescinded on 1 January 1983.

The CSSR Government measure is linked to the existing instructions, takes over from them the fundamental part and supplements them by minor revisions in accordance with the experiences gained during the 1979-1981 period. From the former instructions, the measure takes over the sections in which stability over a longer period is anticipated, namely:

a) scope of penalizing for low-quality production;

b) group of organizations to which penalizing applies;

c) manner in which the penalties are applied to the evaluationof the plan and results of organizations' economic activity;

d) definition of losses from low-quality production;

e) duties of central agencies in securing the application of these penalties.

The section of instructions which regulated specific penalties for low-quality production in individual areas of financial incentives was already incorporated effective 1 January 1982 in the appropriate regulations, namely:

--Decree No 143/1980 of SBIRKA on regulation of wages payable and remuneration of work, and guidelines of the Federal Ministry of Labor and Social Affairs No 31-9333-3102 of 17 January 1983 on the procedure to be followed in regulating wages payable which became effective on 1 January 1983;

--Decree No 162/1980 of SBIRKA on financing the replacement of capital assets (so far as the fund of development is concerned);

--Decree No 165/1980 of SBIRKA on the cultural and social services fund (insofar this fund is involved).

The measure does not indicate the account to which the losses from low-quality production should be charged nor in which manner they should be reported. This is spelled out in the special guidelines of the Federal Ministry of Finance. They contain some more precise definitions and supplements, but no fundamental changes.

Nor does the measure describe the ways in which the harshness of penalties for low-quality production could alleviated. In its Resolution No 253/1982 the CSSR Government approved exceptions for some sectors and branches, and authorized the presidiums of the CSSR, CSR and SSR governments to grant additional exceptions and deviations from the government measure if the properly documented requests are submitted by the appropriate central agency.

If the penalties for low-quality production are particularly harsh for some organizations in individual areas of financial incentives, they can be alleviated only within the regulations just mentioned.

The measure includes the penalties for low-quality production among the tools constituting a uniform system of quality control in the organizations. It primarily emphasizes the tools designed to actively promote higher quality and to eliminate low-quality work. Penalties for low-quality production constitute a supplement to these tools whose purpose is to reduce the amount of low-quality production and work.

Scope of Penalties for Low-quality Production

There is no change from the existing instructions in the scope of penalties for low-quality production. Losses from low-quality production are projected into the specified indicators during the evaluation of plan fulfillment and organizations' economic activity as well as into the financial incentives for the organizations and their workers (that is, into the financial incentives for individuals, collectives and enterprises).

Organizations to which Penalties Apply

Explicitly described groups of organizations (such as industrial organizations managed centrally and by national committees, and production cooperatives) have been subject to penalties for low-quality production so far. According to the new measure, penalties apply to specifically described activity regardless of the nature of the organization. They apply to industrial activity (including repairs), cons-ruction, agriculture, forestry, mining and water management, freight transportation and postal shipments. Penalties do not apply to merchandising, design activity, research and development, rendering services and so on. According to the new arrangement, penalties for low-quality production can be imposed in an industrial organization for its industrial and construction activity, but not for merchandising research and development. In a commercial organization, penalties may be applied to its industrial activity, but not merchandising.

The measure applies to the state economic organizations, agricultural cooperative organizations and other socialist organizations. It applies both to individual enterprises and special-purpose organizations within the VHJ regardless of their form (concern, trust, sectorial enterprise) as well as to VHJ as a whole.

Explicitly exempted from the penalties are budgetary and subsidized organizations. In production, consumer and housing cooperatives, and in mass organizations the penalties for low-quality production are regulated by their supervisory organs.

Penalties Reflected in Evaluation of Plan Fulfillment and Economic Results

The measure changes the method of penalizing losses from low-quality production for purposes of evaluating the plan fulfillment and results of organizations' economic activity. These losses are fully reflected in output as in the past. However, these losses are reflected only in the amount corresponding to the losses-output ratio in general sales, their structure, adjusted value added or reduced output, and profit. A similar procedure is followed, if so-called derived indicators (such as labor productivity, profitability, cost and return on capitals assets) are computed from the above indicators for these purposes. By this change the form of penalties was put on a uniform basis for all purposes.

Definition of Losses from Low-quality Production

The definition of losses from low-quality production remains essentially the same as in the past. Thus, these losses include, because of low-quality production, price discounts, fines and punitive damages, losses from external rejects, cost of repairs during the warranty period (after subtracting the cost of planned service to the customers within the warranty and amounts for extended warranties according to agreement between the organizations or on the basis of the supplier's unilateral declaration), fines and some expenditures paid according to Law No 20/1968 of SBIRKA on testing by state laboratories, and losses from internal rejects exceeding the stipulated permissible limit. These losses are divided in the measure into three groups:

--losses resulting from the delivery of defective products, work and performance (the so-called external losses from low-quality production);

--losses resulting from exceeding the permissible limit of costs caused by low-quality work in the organization (the so-called internal losses from low-quality production(, and

--fines and some expenditures paid according to Law No 30/1968 of SBIRKA on testing by state laboratories.

The measure increases losses from low-quality production in three instances.

First, in the losses from low-quality production are included the payments for compensation of damage caused by defective performance or the cost of rectifying the resulting situation. Thus, it is possible to penalize the supplier for the delivery of inferior-quality products even after the expiration of the warranty period--according to the amendment to the Economic Code until the end of the 5th year--and in export shipments up to the end of the 10th year after the expiration of the warranty period. The existing shortcoming resulting from different warranty periods is thus modified.

Second, losses from low-quality production now include extra expenditures resulting from refusal to accept products for export because of their recurrent inferior quality or the impossibility of selling them abroad because of their inferior quality on the basis of the customer's justified complaint.

Third, losses from low-quality production now include the amounts paid by carriers or the postal service as compensation for the destruction, damage, partial or complete loss of the shipment. Losses from low-quality activity are thus defined in these organizations in the manner corresponding to the nature of their activity.

The measure thus defines with more precision the losses from low-quality production largely in accordance with the explanations to the existing instructions. It is unequivocally stated that the cost of eliminating small backlogs in construction work are to be included in the losses from low-quality production. Expenditures related to planned services to customers within the warranty are subtracted from the cost of warranty repairs in the calculated amount. The sales tax on replacement parts used in repairs during the warranty period are excluded from losses. Losses from low-quality production include the cost of repairs carried out under the warranty, depending upon withdrawals from, but not allocation to, the reserve fund earmarked for this purpose. Losses from low-quality production are reduced by the amounts paid to the organizations by the subcontractors for the defects in their deliveries, by the carriers and postal service because of the quality loss during transportation, by its own workers for their inferior work and also the amounts received from sale or other use of returned defective products. If a random inspection is carried out and found satisfactory, the costs of exchange of individual determined defective products are included in the internal losses from low-quality production. In shipments between the concern enterprises and concern special-purpose organizations of the same concern losses from low-quality production are included in internal losses from low-quality production.

Duties of Central Organs and Organizations

In accordance with the measure, the central organs must define internal losses from low-quality production and devise the necessary methodology for their determination. This concerns both industry and other sectors in which penalties for low-quality production are applied. The central organs must set the permissible limit for internal losses from low-quality production. This limit is set at the necessary level corresponding to the technical and technological standard of the sector in question on the basis of technical-economical analyses and with reference to the latest scientific and technological achievements including inventions, improvement suggestions and industrial models applicable in the respective sector. The central organs must systematically verify the stipulated limit and make appropriate adjustments at the beginning of the calendar year in order to set it constantly lower.

The CSSR Government resolution by which the measure was approved assigns additional duties to the organizations. The organizations must consistently check and uncover any sign of low-quality production, and determine and correctly and completely state the losses from low-quality production. It is necessary to consistently apply penalties to the workers, if it is found that they try to conceal the actual amount of losses, to record it incorrectly and not to apply penalties to the workers responsible for low-quality production. The organizations must also penalize, within the organization, individual departments within the intraenterprise management and individual workers for low-quality production, in accordance with the effective regulations. The situation and level of application of financial responsibility, including damages, are regularly evaluated every year. Usually they are combined with the annual analysis of the organization's economic results.

Special Arrangements in Some Sectors and Branches

The CSSR Government Resolution No 253/1982 lists the divergencies in the definition of losses from low-quality production for some sectors and branches which are necessitated by the special nature of their activity.

In the organizations of the Federal Ministry of Fuels and Power, losses connected with deliveries of solid fuels, electric energy, gas and heat are not included in losses from low-quality production. The reason is that these are raw materials whose quality is affected by natural conditions and that the procedure in deviations from the stipulated quality is spelled out in detail in the delivery terms.

As to the products of engineering metallurgy (castings, forgings and presings), only those amounts are included in external losses from low-quality production which exceed the highest permissible limit stipulated by the supervisory central organ as for internal losses from low-quality production. The defects in these products can usually be discovered not by the manufacturer, but only by the customer when they are used.

In the organizations of central engineering organs, losses from low-quality production in shipments of engineering products include losses from repairs under warranty which exceed the highest permissible limit stipulated by the supervisory central agency. This stipulated limit should be below the losses reported in the preceding year. This exception is justified, particularly for deliveries of consumer goods for which the warranty periods have been extended to as much as 5 years.

In the manufacture of footwear, in the losses from low-quality production are included the amounts exceeding the permissible limit which is set by the supervisory central organ. This limit must be below the losses reported in the preceding year. In view of the particular nature of this production, most of the defects are discovered only by the consumers. Only a small production of defects can be discovered before the merchandise is shipped from the production enterprise.

In deliveries of rough wood, low-quality production will be penalized gradually. As of 1 January 1983, the external losses from low-quality production will be defined and recorded on the basis of justified complaints. After the evaluation of 1983 results, it will eventually be considered whether it will be necessary to set the highest permissible limit for these losses. The low-quality deliveries of rough wood will be penalized only beginning 1985.

In railroad freight transportation, only the compensations paid for the destruction, damage, partial or total loss of shipment and also the paid fines and punitive damages connected with these shipments are regarded as losses from low-quality activity. Since the CSSR railroad network constitutes one integrated whole, the losses from low-quality production will be determined for the entire CSSR, and they will be broken down for individual railraod organizations in the scope and the manner to be determined by the Federal Ministry of Transportation.

As to nonspecialized internal repairs in organizations of the Federal Ministry of Transportation, only those losses which exceed the highest permissible limit of internal losses are included in losses from low-quality production.

A similar approach as in railroads is permitted for similar reasons also in the organizations of the Ministry of Communications. The total costs paid for the destruction, damage, partial or total loss of shipments in the CSSR will be split among the individual communications organizations in the extent and in the manner to be determined by the Federal Ministry of Communications.

Conclusions

Quality control of production and other production activity employs at the present time both direct tools--plans and indirect tools--price and financial incentives. Among these indirect tools, the penalties for low-quality production which have been applied since 1979 are based on the determination of losses from low-quality production. On the basis of positive experiences, these penalties have become part of our legal system as of 1 January 1983. This was effected by CSSR Government Measure No 116/1982 of SBIRKA.

This new measure does not represent any substantial change in the penalties. On the basis of past experience, only minor adjustments have been effected, particularly in order to supplement, redefine and make more precise the existing instructions. These changes concern primarily the description of the group of organizations to which these penalties apply, the manner in which the penalties should be considered in the evaluation of plan fulfillment and results of organizations' economic activity, the definition of losses from low-quality production and setting of tasks for central agencies in imposing these penalties. An important step is the more precise description of low-quality activity in other than

industrial production organizations. CSSR Government Resolution No 253/1982, by which the above CSSR Government Measure was approved, directs the organizations to making these penalties more effective, particularly by precise determination of losses from low-quality production and consistent application of penalties within the organizations.

The government measure is linked to the existing arrangement and, to insure continuity, the Federal Ministry of Finance has issued methodological guidelines published in No 2/1983 of FINANCNI ZPRAVODAJ. These guidelines contain a list of all regulations pertaining to the penalizing of low-quality production, pertinent explanations and the way in which the losses from low-quality production should be accounted for.

10501
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INDUSTRIAL FERTILIZER DEVELOPMENTS EXAMINED

Prague REVUE OBSCHODU/PRUMYSLU/HOSPODARSTVI in Czech No 6, 1983 pp 24-26

[Article by Ladislav Sprock]

[Text] Satisfying the nutritional needs of the population will not be possible even in the future without agrochemicals which are being used, on one hand, as stimulants of plant growth and as means of improvement of agricultural land resources and, on the other hand, as agents protecting the growing plants against various kinds of pests. At the present time, for instance, more than 55 million tons of nitrogen fertilizer are being used in the world; in 7 years, it will be 92.8 million tons, and at the end of this century almost 140 million tons. This is the estimate of the experts, based on the prognosis of the population growth on our planet and on the [anticipated] gradual increase on consumption of food in the world. In the next 20 years, it will be necessary to increase food production to the point that an additional 2 billion people could be fed and the nutrition of roughly 1.5 billion people would be substantially improved. If we look at some further data in the prognosis, we shall discover that this "food increase" will be produced by a smaller number of active agriculturists than is the case today. For instance, in the developed countries the number of people employed in agriculture will drop from 12 percent to about half that number. For this reason, and for other reasons as well, we must look at the ever greater use of chemicals in agricultural production though the ecologists, hydrologists, foresters, gamekeepers and others who work with nature are not too happy about such developments. [since] improper use of chemical agents, overuse of industrial fertilizers, etc. often has a negative effect on life in nature.

In Czechoslovakia, roughly 5 million tons of industrial fertilizer are being used each year. In our country, just as in others, the production of not only nitrogen fertilizers but also of complete fertilizers (mixtures of nitrogen, phosphorus, and potassium) will be expanded and the level of pure nutriments increased. The situation is similar in the manufacture of products against agricultural pests. In comparison with neighboring states, Czechoslovakia possesses considerable reserves in this respect, but in the final analysis this casts a negative light on the general state of management in individual agricultural enterprises where plants under cultivation are being destroyed by diseases caused by viruses, fungi, etc. It is estimated

that losses in fields and gardens are as high as 10-20 percent of the yield, at times of prolific procreation of pests even twice as high. The losses in storage, too, can run as high as 25-30 percent if the stored goods are not properly cared for. While in neighboring Hungary almost five Kg of biologically effective substances in the form of pesticides are being used for every hectare of land, in our country it is approximately one-half that.

What the Manufacturers of Industrial Fertilizers Produced in the North Bohemian Chemical Concern

One-half of all industrial fertilizers manufactured in Czechoslovakia comes from Czech chemical plants which produce yearly more than one-half million tons of pure nutriments; one-half of these are nitrogen fertilizers, more than one-third phosphorus fertilizers, and the rest potassium fertilizers. Chemopetrol, a concern enterprise Severoceske chemicke zavody [North Bohemian Chemical Enterprises] in Lovosice, manufactures yearly 1.3 million tons of industrial fertilizers, which represents almost 300,000 tons of pure nutriments. Every day, more than 150 railroad cars loaded with loose or sacked fertilizer leave the gates of this plant.

Just as in other branches of chemical production, in the production of industrial fertilizers ways are being sought to cut cost. The aim is to raise output in production that calls for high technology and sophisticated work. This calls, above all, for better utilization of basic raw materials; this is the prerequisite for a more effective manufacturing process and, at the same time, a greater use value of the product. In order to lower the demand for hard currency necessary for production, it is essential that basic raw materials which have to be imported be used as prudently as possible.

The possibility of raising production is limited in some instances by plant capacity. Innovation is anticipated in the production of liquid fertilizers. These represent a new perspective in the feeding of plants and remove hard physical labor during application. [They are important] from the economic point of view [since], when applied in very precise amounts, they cover effectively a very large area. They are being used for surface [spraying] of the soil as well as for [spraying] directly "on the leaf." Naturally, there are more advantages to them; they can, for instance, be combined with pesticides, they raise the productivity of labor, etc. At the present time, more than 10,000 tons of liquid nitrogen, notrogen-phosphorus, and nitrogen-calcium fertilizers are being manufactured in Lovosice every year. New is an assortment of single-component and double-component liquid fertilizers designated for special nutrition of plants, particularly for additional fertilizing during the plant's period of growth. The assortment consists of six varieties that can be used either separately or in combination. The botanists in particular will appreciate this new product, since it will enable them to nurture the plants scientifically, using the basic nutriments in a chosen ratio according to the needs of the moment and on the basis of agrochemical analysis of the soil and the plants.

To the above-mentioned assortment of fertilizers belong, e.g., the liquid nitrogen fertilizer DAM 390 or the nitrogen-calcium suspended fertilizer

CANSOL S, used for "on the leaf" spraying of apple trees and of barley growing in highly acid soil. It is also used as a preventive against bitter brown spots on fruit. The name ENPEKASOL represents a combination of six liquid fertilizers to be used for extra fertilizing of garden and field produce.

Research primarily focuses on increasing the number of multicomponent fertilizers from those in general production, on the optimal concentration of pure nutriments in the finished products, on the improvement of quality, on easy operability, and on easy storage. It goes without saying that the individual CEMA states cooperate in the research. The concern enterprise North Bohemian Chemical Concern in Lovosice is a member of the section on industrial fertilizers of the permanent commission for cooperation in chemical industry.

What's New in Spolana in Neratovice?

Production focuses on fungicides that would help farmers in their fight against diseases caused by fungi, e.g., potato mold. In Spolana, for example, they manufacture the preparation CURSATE which protects hops against perenospora. Among the many herbicides, the preparation ROUNDUP is of interest. It is used for destruction of stubborn weeds; it penetrates clear to the root and thus destroys the weed.

The application of chemical agents in agriculture should be economical. This is why at Spolana production is oriented toward pesticides, insecticides, and fungicides which could be mixed with liquid fertilizers. Besides lowering the number of applications, these mixtures also limit the use of agricultural vehicles in the fields.

The protection of plants against diseases, pests and weeds enables better quality of harvested produce and substantially higher returns worldwide. In Czechoslovakia, as in other CEMA countries, a carefully administered protection of plants is also one of the measures that should help bring about self-sufficiency in the production of food.

To find a perfect product for protection of plants is not easy. For the manufacture of one pesticide, it is necessary to examine about 12,000 various substances. Therefore Chemopetrol, which has the monopoly for production of spray chemicals in the Czech Socialist Republic, carries out at the concern enterprise Spolana in Neratovice only the final stages of the preparations and cooperates with foreign firms, e.g., Shell, ICI, Monsanto, and others. The research in new pesticides is not only lengthy, but also costly. From foreign firms we buy only components which we process into the final form and pack. This international cooperation and the adoption of our foreign partners' experiences in the area of pesticides is undoubtedly to our advantage from the economic point of view.

The concern enterprise Spolana manufactures the highly valued preparation OESTROPHAN which is used in veterinary medicine. It won a prize last year

at Incheba and proved itself not only in our own agricultural enterprises but also in the Bulgarian People's Republic, the GDR, and the USSR--countries where it is being exported. This preparation is a very effective substance used in animal production. It is being used for influencing the rutting of cattle and for a predetermined induction of birth of pigs. According to the latest research and practical experience, OSTROPHAN is also being used as a stimulant in the reprodcutive process and for therapeutic purposes. Bu its use, a positive result of insemination of animals is raised from 60 to 90, even 100 percent. The use of this preparation methodizes the raising of cattle and hogs, brings savings of hard currency hitherto used for imports of similar preparations, and improves the utilization of expensive imported insemination aids.

Cooperation of CEMA Countries

The nurture and protection of plants represents one of the fundamental prerequisites for raising the level of crop production. Therefore, this area also occupies an important position in mutual cooperation of agricultural and chemical establishments in the CEMA countries. The countries of this council use chemical agents intensively in their agricultural production and are engaged in solving specific problems at agrochemical stations and centers. For instance, they prepared a number of effective measures for combating pests in cultures which resulted in a higher yield per hectare. Thus far, more than 380 preparations have been tested, and from this number roughly 100 have been recommended for use within the CEMA lands. At last year's Incheba, a document was signed dealing with the extension of the agreement concerning multilateral specialization, cooperation in production and mutual delivery of pesticides in the years 1982-85. On this basis, Czechoslovakia is to export until the end of 1985 Fetex EC-50 and Metation EC-50, two preparations for protection of plants, in the total value of Kcs 215 million, and import pesticides for Kcs 650 million. There is extensive scientific and technical cooperation in the field of agrochemical research among the CEMA countries, and many common tasks that are being worked on within this framework are leading to further specialization and cooperation. It is a contribution to a gradual removal of dependence on the import of certain products and components from nonsocialist states.

12435
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DUSLO SALA ENTERPRISE ADDING PESTICIDE PRODUCTION

Bratislava AGROCHEMIA in Slovak No 6, 1983 pp 169-170

[Article by Eng Stanislav Gaher, candidate for doctor of science, Research Institute of Chemical Technology, Bratislava-Raca, and Eng Koloman Sabik, Duslo Sala national enterprise: "Duslo Sala Preparing for Pesticide Production"]

[Text] In keeping with congress resolutions, the Duslo Sala national enterprise has been devoting increased attention primarily to increasing the production of industrial fertilizers. In 1979 the enterprise began to implement the results of research by the Research Institute for Agrochemical Technology by initiating the Agro II project, which includes three pesticides and which has recently been expanded by the authorization for a production unit for an original fungicide, Fademorf.

The practical requirements for assuring pesticide production are diametrically different from those for fertilizers. A large product mix, the sophisticated production requirements, frequent changes as a result of acquired resistance by the pests and pathogens causing plant diseases and by weeds to the pesticides being produced all cause complex problems. Our chemical industry cannot assure the production of the full range of required pesticides. The development of pesticides is retarded primarily by an inadequately developed domestic raw materials base.

This problem of assuring the production of pesticide preparations will have to be solved through effective and mutually advantageous cooperation between the member states of Interchim.

Increased attention is being devoted to the construction of production facilities for the preparations Decemtion EK 20, Fatex EK 50, and Novozir Mn 80. Further evidence of this is the fact that the entire Agro II project has been incorporated into the state plan.

The production units are being constructed as multipurpose facilities at which it will be possible to produce other effective substances as well.

Fademorf EK 20 is being produced on an experimental assembly line, and the construction fundamentals thus obtained will be utilized in the construction

of a large-capacity production facility. In this way the time is shortened from the discovery of a compound to the practical introduction of a preparation.

At present, we are devoting increased attention to preparations which will be produced within the framework of Agro II, as well as to their practical application. In accordance with the requirements of the controlling agencies, the Ministry of Agriculture and Food and the Ministry of Public Health, and with the principles of environmental protection, we have modified the production technology for Novozir Mn 80 ao as to meet the requirements for the physicochemical properties of the preparation as well as for the content of ethylene ureas (ETU) and their residuals on treated crops. This year, on the recommendation of employees representing agricultural practice, we worked out the final composition of Fatex EK 50 in such a way that the final version of the preparation will be an 80 percent emulsion concentrate designated as Fatex 80. In the 1982 season, we carried out supplementary biological experiments with this preparation and prepared the basics for its registration. Novozir Mn 80 and Fatex EK 80 will be the first two preparations delivered in 1983 for practical usage. The Decemtion EK 20 and Fadenorf EK 20 perparations will be available in the 1984 season. Following the initial phase of use, production will increase gradually, with the planned full capacity production of all preparations reached in 1985.

In our opinion, it would be helpful to provide employees engaged in the assurance of plant protection with some concise information about the above preparations, their composition, properties, and the practical possibilities for their application to plant protection.

Novozir Mn 80--This is a sprayable, dispersable agent designed for the protection of crops against destructive diseases of field crops, fruit trees, technical crops, decorative stands and various types of vegetables. It is composed of 80 percent of its active ingredient, mancozeb. This preparation is not poisonous for humans, but is health-threatening when used or inhaled. It is relatively harmless to bees, but nevertheless may not be used when blossoms are out. It is, however, extremely poisonous to fish, so that care must be taken during application to see that the preparation does not make its way into lakes, either as surpluses of the sprayed agent or as rinse water. It is also important to incinerate the packaging material. The preparation is classified as dangerous for game animals, meaning that the guidelines of the updated version of the declaration must be adhered to. The preparation is considered a flammable substance. During warehousing it cannot be allowed to get damp or there is a danger of decomposition and spontaneous combustion.

Novozir Mn 80 will fully replace in terms of its biological effect the Dithane M 45 currently in use. We have convinced ourselves of the identical biological effects and of its potential uses, in conjunction with employees of testing and specialized institutes, on many occasions in experiments on potatoes, wine grapes and in orchards. Dosages and concentrations for the achievement of the desired effect are the same as for Dithane M 45. Likewise,

when preparing the liquid to be sprayed, it is necessary to proceed by first thoroughly mixing the weighed amount of the agent in an auxiliary container with a smaller amount of water to the consistency of a mash which is then poured into the container of the sprayer. It is not acceptable to pour the agent directly into the sprayer, and it is also forbidden to mix the concentrates of 2 agents in the same container. Each preparation must be mixed separately and poured into the container of the sprayer or of the preparatory tank. For practical purposes it will be delivered in 10 kilogram packages, because a smaller package was not agreed upon between the producer and the consumer.

Fatex EK 80 is the designation chosen for a herbicidal agent which is characterized by high effectiveness against Avena fatua (the wild oat). This selective herbicide is designated for the destruction of the wild oat that appears among sugar beets, fodder beets, wheat and spring barley. It is composed 80 percent of its active ingredient, chlorfenprop-metyl. This is not poisonous for humans, is however harmful to bees, but relatively not harmful to game animals. It is strongly poisonous for fish.

Fatex EK 80 is a leaf herbicide and may be used only after the plants have emerged, and ideally when the wild oat has 2-4 leaves. When applying it, it is important that the entire plant, including the stems, be wet down. High temperatures have a negative impact, and at temperatures in excess of 22 degrees Celcius the preparation should not be used. The preparation is sufficiently effective at dosages of 5 liters per hectare, diluted in about 300-400 liters of water. With thick growth, better results are achieved with a higher dosage of water. We do not recommend mixing Fatex EK 80 with Retacel, DAM 390, or with contact herbicides (Faneron, Ladob, Aretit).

The wisdom of beginning the production of Fatex EK 80 is open to question, since it is very similar to Bidisin Forte. At present its herbicidal properties are to some extent exceeded by agents from the Suffix group. When the foundations were being laid for its production, however, it belonged among the state-of-the-art preparations. Moreover, in terms of production it remains today the only herbicide effective after plant emergence whose production we can assure. We are convinced that an opportunity can be created for the preparation Fatex EK 80 in spite of the more effective, newer preparations against oats, and that its proper use will make possible a substantial reduction in the losses caused by Avena fatua of grains and sugar beets.

Decemtion EK 20--This is an emulsion agent characterized by a broad range of effectiveness against sucking and chewing pests. It is designated primarily for the destruction of the potato beetle, sucking and chewing pests in fruit raising, grape raising, vegetable rassing, decorative gardening, as well as against M. aeneus which attacks oil rapeweed (the rape bettle).

Decemtion EK 20 contains 20 percent phosmet. It is classified as a poison, becaude the acute oral toxicity value (LD_{50}) of the preparation is 675 milligrams/kologram for Wistar brown rats. The preparation is strongly poisonous for bees and fish and is also dangerous for game animals.

Decemtion EK 20 has effects equal to the agent Imidan WP 50 which has been used in a dispersible form. This was the 10th, and last insecticidal preparation from the phosphoric acid triester group. Its production was prompted by the discovery of resistant species of Leptinotarsa decemlineata to chlorinated hydrocarbons, and specifically as a replacement for the imported, highly toxic agent Birlane. It acts primarily on contact and as a fumigant. It has no systemic effect, but occasionally penetrates to plant tissues and acts in depth. It has a broader spectrum of impact than Metation EK 50, a significantly improved acaricidic impact. Principally, it is not phytotoxic. It can be used to protect grapes, rape weed, cabbage family crops, and the like. Its recommended usage against L. decemlineata is in the amount of 3 liters per hectare, against M. aeneus (rapeweed) 1.5 liters per hectare, for use on fruit trees at a 25 percent concentration, for grapes 3.75 liters per hectare, and for vegetables 3.75 liters per hectare. When preparing solutions it is forbidden to mix concentrates and the preparation may not be applied concurrently with alkaline preparations. It will be delivered in 1 liter glass containers.

Fademorf EK has a systemic effect on pathogens from the genus Erysiphaceae and is used in the form of a spray. It contains 20 percent trimorphamide. It is not considered a poison and relatively harmless to bees. It is dangerous for game animals and poisonous for fish. Because the Fademorf EK 20 preparation was originally developed in the laboratories of the Research Institute for Agricultural Technology, we have the greatest experience with it to date, experience we have gained over the past 3 years. The Chemika sectorial enterprise produced, beginning in 1978, about 10 tons of Fademorf EK 20 per year from concentrate produced at the Research Institute of Agricultural Technology and provided this for practical use. At a 0.125 percent concentration, this preparation had a very positive protective impact against the pathogens P. Leucotricha, U. necer, E. cichoracearum.

Fademork EK 20, applied in a 0.125 percent concentration adequately protects apple trees against P. leucotricha and also against V. inaequalis. Given serious infection pressure, however, it may also be necessary to apply Fademorf EK 20 at a 0.25 percent concentration. For the protection of tobacco against E. cichoracearum, Fademorf EK 20 is adequate at the 0.125 percent concentration, but in view of the daily increases in leaf area, in cases of serious infection pressure it is necessary to repeat sprayings at 10-14 days intervals.

At the end of 1980 we completed the preliminaries for the use of Fademorf EK 20 for the protection of field cucumbers against E. cichoracearum. Only a single spraying with Fademorf EK 20 is permissible, with a dosage of 2 liters per hectare, but at a concentration of 0.25 to 0.33 percent.

In the 1981 season we obtained further documentation, on the basis of which Fademorf EK 20 was registered for the protection of fodder barley against E. graminis, in a dosage of 2.5 liters per hectare. The treatment should take place as indicated, but as a rule at the end of sprouting.

Roses raised in the open were a further crop for whose protection Fademorf EK 20 was approved at a 0.125 percent concentration in 1981. To protect

roses raised in greenhouses and portable greenhouses, however, it is necessary to use a 0.25 percent concentration and repeat sprayings at shorter intervals.

Toxicological research was completed in 1982 and yielded the following increasingly precise schedules for the final spraying prior to harvest: fodder barley, 60 days; apples and grapes, 28 days; tobacco, 21 days, cucumbers, 14 days; and roses, 2 days.

These 1982 results were adequate for the registration of Fademorf EK 20 for the protection of hops, black currants, red currants, and gooseberries against mealy moths. The preparation Fademorf EK 20 will be able to be used on the above crops after the startup of production. It is completely comparable both in its scope of impact and protective effect with currently imported systemic preparations.

Fademorf EK 20 research may be considered complete, in terms of its use in the CSSR. The potential uses for trimorphamides have not, however, been exhausted. Additional final versions of these have been prepared and the results achieved have been very favorable. We will provide information about these applicational forms after research has been completed.

9276
CSO: 2400/420

FRG NOTES CREDIT GRANT EXPECTATIONS UNFULFILLED

Frankfurt/Main FRANKFURTER ALLGEMEINE ZEITUNG in German 9 Sep 83 p 9

[Article by "fy," Bonn correspondent: "Expectations coupled to the first GDR credit have not yet been fulfilled."]

[Text] The talks conducted during recent days and weeks between members of the GDR leadership and West German politicians and economists have confirmed Bonn's expectations that the GDR will considerably loosen the stranglehold on human relations and contacts between the people in both German states in the foreseeable future. Moreover, in Bonn the impression has been strengthened that the GDR needs additional foreign exchange credits this year to be able to meet its payment obligations, as already reported by this newspaper in its 29 July issue. Rumors are that the GDR needs an additional 2 billion marks by mid-November.

On the occasion of the Leipzig fair alone, the number of meetings in recent days was especially great. In addition to State Secretary von Wuerzen of the Federal Economics Ministry, CDU Treasurer Kiep, Lower Saxony Economics Minister Mrs. Breuel, who visited Leipzig, the members of the inner-German committee of the Bundestag who, together with committee chairman Reddemann visited Leipzig, Halle, and Potsdam, held talks with the SED and GDR leadership. In addition, there were the meetings of former federal chancellor Schmidt with SED chief Honecker and Deputy CDU Faction Chairman Ruehe with Politburo member Hermann among others. A week before that, SPD politician Bahr had also met with Honecker in East Berlin.

The West German participants in these meetings seem to agree on the impression that the GDR wants to avoid a deterioration in the relations as had now and then been expected as a consequence of counterarming and would like to continue to develop its relationship with the Federal Republic as unimpaired by this fact as possible. An indication of this attitude is the fact that the GDR wants to resume and conclude the negotiations on a cultural agreement with the Federal Republic that had been suspended for years, which means that it is giving up its resistance to the inclusion of West Berlin. Beyond that, the GDR leadership evinces interest in talks and negotiations comprising various topics. They range from arms control and disarmament to expansion of tourism and include especially questions of environmental protection, for example the desulfurization of flue gas or safety precautions in nuclear

energy technology. East Berlin is also said to be indicating interest in a new determination of the postal lump sum payment and in an agreement on science and technology. This also applies to arrangements as regards the Elbe border; thus far no agreement has been reached concerning its course.

In recent weeks it has been repeatedly pointed out in talks with the GDR leadership that it had not fulfilled the expectations with its readiness to reach agreements in these and other fields, especially as regards postal affairs, and in doing so to take into account the FRG interests that had been of decisive importance in achieving the credit amounting to billions. Neither government nor opposition circles in Bonn have forgotten since June that the GDR itself had described the framework of expectations that made the credit a reality with its formulation "confidence in return for confidence." Regardless of the outward restraint practiced by the Bonn parties in this question, it is undeniable that noticeable qualitative improvements are expected. This applies to the possibility of being able to travel to the GDR with as few conditions as possible--as regards the compulsory exchange of currency--, as well as the lowering of the minimum age for Germans in the GDR who want to travel to West Germany.

It is undeniable among all the parties that it is now the GDR's move and that without appropriate changes the question concerning possibly desired credits cannot be asked, not to speak of negotiated. Informed FRG circles figure that the amount of Western foreign exchange needed by the GDR this year to"service"its credits is approximately $1.5 billion or about DM3.7 billion, but cannot be raised from current receipts and export surpluses. The billions credit granted early July was used by the GDR for interest payments and loan repayments. In addition, there are indications that the GDR needs an additional DM 2 billion. The high GDR demand for foreign exchange is explained essentially with the amount fo GDR indebtedness in the West and the higher interest level. The GDR gross indebtedness in U.S. dollars is now estimated at 8.5 billion. If the GDR liabilities toward the FRG are added, then the GDR indebtedness to the West amounts to about DM 30 billion. Experts cautiously estimate the total amount to be raised by the GDR this year for interest and repayments at approximately $ 2.5 billion. In the opinion of West German experts, the GDR credits are largely short-term credits. Therefore, the GDR situation next year will be similar to that of 1983: interest of clarly more than $ 1 billion and demand for amortization and/or debt rescheduling of 30-40 percent of the gross indebtedness. In the opinion of experts, what East Berlin needs is a debt rescheduling of its obligations from short-term to long-term credits.

12356
CSO: 2300/397

OFFICIAL FAVORS FLEXIBILITY IN FOREIGN TRADING RIGHTS

Budapest OTLET in Hungarian 21 Jul 83 p 8

[Interview with Janos Deak, deputy head of a main department of the Ministry of Foreign Trade, by Pal Emod: "Organizational Format or Competitiveness"]

[Text] "Business begins with the offer and not with the signing."

Should industry take over the foreign trade function or not? Should the foreign trade enterprises subdivide, or reorganize along the Japanese example into trading firms? In the present debate about the organizational system the foreign trade is followed with special attention. We visited Janos Deak, deputy head of the Foreign Trade Ministry's main department for enterprise supervision and control to ask for answers to the above questions.

[Question] In what direction did the changes which occurred in the world's economy, move the trade and foreign trade organizations in the developed capitalist countries?

[Answer] It can be observed in the countries trading with us that the retail and wholesale trades have created an organically interconnected purchasing network for products which affect the population, and that these new organizations have divided the national market and have also created the technical conditions (warehouses, chains of refrigerating facilities, etc). It goes with this that the value of agents has decreased and if a Hungarian exporter wants to keep or increase its share of the market it must become a part of this newly developed system.

[Question] Is this valid also for the investment means?

[Answer] Three momentums must be taken into consideration here. One is the further expansion of the multinational organizations and the broadening of their sales networks. The second one is the general contracting activity (the most spectacular type of which is the turn-key delivery) becoming "more popular," and the third one is the increased use of leasing (that is, renting out machinery) and appreciation of the banking operations related to it.

What is involved here is that the (foreign) trade is not separated from production but rather follows the changes which is possible only if it conforms

better. The role of the Japanese trading firms must be mentioned here which at times becomes mystified in this country. The truth is that not the format, that is, the trading firm is the decisive aspect in Japan either, but rather the content, that is the competitiveness since even the Japanese trading firm doing the best work could not have sold, for example, several hundred thousand cars in the United States if the Japanese automobile industry were not competitive.

But trading firms did not develop in Western Europe since instead of this the multinational firms with strong capital were spreading and expanding.

[Question] Which also means that the foreign trade organization does not tolerate patterns?

[Answer] This statement is true for practically all areas of the economy, and when the world economic processes are changing rapidly we see it in foreign trade even more clearly.

[Question] What is the situation in this country? Has the organizational system of the Hungarian foreign trade renewed since 1968, or more precisely: has it conformed to the above mentioned turn in the world's economy?

[Answer] If we examine the last 15 years, we must differentiate between two stages; the one between 1968-1978 and the last 5 years. That is, only slow movement can be seen in the first 10 years, when a few large industrial enterprises took foreign trade into their own hands, and hardly anything else happened. But the foreign trade organization did not truly get built into the production and development processes even at these industrial enterprises but functioned generally as a separate department.

[Question] But in the last 3 years, each year as many as 20 or 30 enterprises received independent or expanded foreign trade rights. So is this a good direction?

[Answer] The numbers are like this: in 1981 20 enterprises, last year 26, and this year 27 economic operating organizations obtained the right for independent foreign trade activity or are expanding their existing foreign trade profiles. If we look only at the 1983 "authorizations" we see that, for example, the Bekescsaba Knit Goods Factory, the FEKON Clothing Enterprise, the Pannonia Fur Industrial Enterprise, and the Energy Management Institute applied for and received independent foreign trade rights for the sale of their products. It should be mentioned certainly not only as a curiosity but also as an economic consideration that the BEKOT [Bekescsaba Knit Goods Factory] engaged the Intercooperation RT [Corporation] to handle its foreign trade deals.

The MODEX--an association of 15 members, 14 clothing factories and the HUNGAROTEX--was granted foreign trade rights as a new enterprise; that is, an organization with joint capital interests was created similarly to the MEDIMPEX, which is the joint foreign trade enterprise of seven pharmaceutical factories which in addition also has the TEK [production equipment trading]

function. And the knit goods subsidiary of Hungarotex, the Trikotex can also be listed here which is becoming independent within the major enterprise, that is, the income of those who work there depends on the business they themselves produce.

[Question] Do these examples prove the healthier development of organizational formats? [sic]

[Answer] Clearly. And the picture is even more favorable if we take into consideration those 120 foreign trade partnerships which developed partly in the areas related to agriculture and partly along the border in cooperative product trading. The rabbit partnership or the wine office are good examples for the first one, and for the latter, the regional organizations created by the Konsumex. The decisive factor in both "settings" is that they make the interest in making profit more direct and is moving in the direction of independent accounting while it also solves the problem of production coordination.

[Question] That is, the increasingly difficult foreign trade conditions have forced the organizational changes, and the increasingly implemented export interests also have an effect.

[Answer] Probably this is what is involved. One thing is for certain: since domestic competition is also increasing in strength, the organizations dealing with foreign trade recognize more and more that business begins with the offer and not with the signing.

[Question] The validity of this statement is obvious for the competing foreign trade enterprises, for example, the Generalimpex, the INTERAG, or the Intercooperation, but is this also true for the "mammoth" foreign trade firms?

[Answer] The foregoing list can be supplemented also with eight brokerenterprises which may also conduct independent foreign trade activities. But the market is open today also in the machine industrial foreign trade, since 200 product types have parallel export rights, that is, we have eliminated the restricted path. And when a producing enterprise applies for one-time export rights, there are no obstacles to that either.

In summary, 196 enterprises are conducting foreign trade activities in Hungary today, and of these there are only 44 specialized foreign trade enterprises.

[Question] What has been said also proves that the organizational reform which is initiated from above, is continuing to be built from the bottom?

[Answer] The important thing is not whether the initiative starts at the top or at the bottom (though generally the decisions made at the top always start at the bottom), but that the foreign trade functions should be performed where it can be operated the most efficiently.

And if this principle will also prevail in the future, then it will also be considered to be a natural thing if several enterprises take a joint position on a market or if in the interest of a business deal they enter into an association or partnership with each other. That is, alongside of the decentralization process centralization is not precluded either, if business demands it. Because even though the foreign trade organizations cannot be reshaped or revamped for each contract, but each specific deal may require a special line-up.

8584
CSO: 2500/446

WORLD BANK CREDIT SEEN SOLVING AGRICULTURAL MACHINE PROBLEMS

Budapest MAGYAR HIRLAP in Hungarian 14 Jul 83 p 7

[Article by Ivan Gador and Nandor Keresztenyi: "Hoping for a Renewal. We Cannot Do It with Zero-Depreciation Tractors: Conversation with Gabor Magyar"]

[Text] I would find it hard to believe even if, let us say, any of the new graduates of our agricultural colleges' mechanical engineering departments knew the answer to the following question: who was Andrei Romanovich? If you give up I will tell you: he was the one who in 1890 built the first primitive version of a harvester-thresher, and it was only after this-albeit soon--that these cumbersome machines drawn by 20-40 horses first appeared on American wheat fields; however, it was only after the tractor was invented that it began to undergo rapid development. In 1949 there were still only 7 combine-harvesters operating in Hungary; by 1952 their number had increased to 764, in 1962 we had 5,604, by 1970 12,000 and in 1975 there were 14,000 of them on our farms. In recent years the number of new combine-harvesters put into operation has declined somewhat, although from the point of view of performance they have been incomparably more efficient than their predecessors, an improvement which can be demonstrated by yet another set set of data. According to these, in 1970 their combined engine capacity was 654,000 kW, by 1980 this increased to 1,303,000 kW and the trend has continued ever since.

Due to these same developments, however, the country's tractor stock has declined: the number of tractors in use has dropped from 67,000 in 1970 to 55,000 today; however, their engine capacity has increased from 2,543,000 kW to 3,105,000 kW.

They Have Become Superannuated

Although these few figures by themselves indicate a spectacular upswing, for years we have heard many complaints: nearly 45 percent of our tractors and almost 28 percent of our combine-harvesters have become superannuated or, as an accountant would put it, have depreciated to zero. In other words, it would be high time for them to be replaced with new ones, were it not for several--mostly foreign exchange-related--obstacles. In order to get an assessment of the present situation, we went to see Dr Gabor Magyar, deputy minister of agriculture and food industry, who as the ministry official in

charge of technical development in agriculture deals with these far-reaching matters and who in his previous position as director of the Corn and Industrial Crop-growing Cooperation [KITE] at Nadudvar, must have had many experiences regarding the complications surrounding mechanization and our chemical fertilizer and insecticide supplies.

"Such complications really did and still continue to exist, and, as they say on our farms, it is always the things we need the most at any given time which we either do not have or have no money for," began the conversation of the deputy minister. "Indeed we have many problems, including such things as availability and spare-part supplies; the latter, for example, has been the subject of countless debates, which have resulted in some progress. The very fact that in Hungary a tractor is subjected to 2,000 hours of use per year, compared to 800 hours of operation in the U.S., made possible the fact that a given U.S. farmer may own several of them, should tell us something. This enormously high rate of utilization, therefore, explains why 45 percent of our tractors have indeed depreciated to zero."

We Must Buy

[Question] And how could these problems be alleviated?

[Answer] First of all, of course, by buying new machines, for it is in our farms' vital interest to be able to use their development funds for improving the technical standard of their production so that they can reproduce not only on a static but also on an increasing scale. These improvements have included such things as energy-saving and moisture-retaining tillage equipment, imported machinery purchased during the first two phases of our intensive grain program, various machines manufactured on the basis of licences purchased and cooperations entered into by our agricultural machine industry, etc.

[Question] What is the ratio among our agricultural machines from the point of view of "origin"?

[Answer] Approximately 40 percent of them have been Hungarian manufactured, made primarily by such firms as the Raba Railroad Car and Machine Factory and the enterprises of Mezogeptroszt [Agricultural Machine Trust] which have assumed a major share of this giant task. For example, it was just recently that the Szolnok Agricultural Machine Enterprise has turned out its 1,000th cylinder rotary baling machine, but domestic industry has also excelled in the production of fodder harvesters, mowers, heavy ploughing tractors, tillage equipment and sowing machines, although most of our self-driven and towed chaff-cutters have been imported. And as for our imports, 45 percent of our machine supplies are of socialist and 15 percent are of capitalist origin. The above-mentioned intensive grain program relies exclusively on these latter, at least as far as harvesters and heavy universal tractors are concerned. The program was started in 1980 by two of our largest plant-producing systems, the IKR [Industrial-type Corn Production System] of Babolna and KITE of Nadudvar, on 134,000 hectares of wheat and corn fields. Last fall

the present or, more precisely, second phase was joined by the Szekszard and Szolnok megye production systems, and owing to a credit from the World Bank the organization of the third phase is now also in an advanced stage. In order to facilitate the fulfillment of this grain program, which has been abbreviated to IGP [Intensive Grain Program], we have already received 233 Claas-Dominator combine-harvesters and this July we are expecting the arrival of 142 tractors, 67 of them from Fiat.

[Question] When we say technical development, we do not just mean machines...

[Answer] Indeed we do not. This concept covers a wide range of things, from biological bases to storage facilities for example, the total cost of which has for years considerably exceeded our machine costs. While we are on the subject of grains, let us examine the technical side of this question. Well, our sowing seeds are suitable for attaining yields of 6 to 8 tons of wheat and 10 tons of corn per hectare, and we are happy to report that the work of Hungarian researchers--especially of those in Szeged and Martonvasar--has brought successful results: already half of our wheat crop is made up of domestically developed strains. Seventy-five to eighty percent of our corn hybrids, on the other hand, are of American--mainly Pioneer--and French origin, for they are very adaptable and produce high yields. Owing to the work of the GABONAMAG [Grain Seed] association, however--which is also comprised of production systems and agricultrual associations as well as a Szeged research institute--the domestic basis of corn-sowing seed production is also about to materialize. In Kiszombor a base-seed processing plant has been established with highly promising prospects.

The Role of Imports

[Question] The beginnings of chemical fertilizer production in our country go back as far as the 19th century, but it was not until 1966 that their application began to overshadow the use of organic fertilizers. In addition, in the fall and in the spring our farms have frequently complained at TOT [National Council of Producer Cooperatives] meetings that they have not been able to buy the amount they need for sowing and mulching....

[Answer] There is a conflict of interests among the users, the sellers and the producers when it comes to the question of storage. Imports keep arriving, while our chemical industry is also continuously producing even though it has been unable to solve its stockpiling difficulties, thus forcing the farms to deal with the problem under less than ideal conditions. We have no machines that can evenly spread solid chemical fertilizers; under the IGP we have begun to take steps toward procuring machines capable of introducing liquid chemical fertilizers into the soil. As for our insecticides, half of them come from capitalist imports, but our foreign exchange problems are well known. Therefore the complaints you have referred to in your question are justified. We are aware of them and we will do everything we can to solve them.

Industrial-type Corn Production System

Competitively, Intensively

One of the things our plant production systems deserve credit for is the fact that for several years now they have made it possible for hundreds of state farms to apply the same principles in growing cereals and corn on many hundreds of thousands of hectares. What is positive about this, of course, is the fact that our production systems are in constant competition with one another and are working to improve their production technologies and able to put the newest findings of their research immediately into practice; last but not least, they also provide the machine systems required for their plant-growing activities. The Industrial-Type Corn Production System, or IKR, has gone even one step beyond this: operating as a joint enterprise, it can use its own development funds to purchase a part of the machine systems required by its co-partners. We asked Janos Toth, the director of IKR, to explain to us the extent to which the machines procured on World Bank credit are expected to improve the machine supplies of their co-partner farms.

"They are expected to put an end to some serious deficiencies," said the director. "As for the 120 to 130 co-partner farms that participate in the Intensive Grain Production Program, it means that in the near future the machine situation finally will not keep them from attaining the goals of our grain program."

[Question] And what about the other 120 to 130 farms that are not participating in the program but are members of IKR? What will happen to them?

[Answer] We will be able to solve even our most serious problems, since the purchase price of the machines we have procured under the World Bank's credit offer are fully covered by the amount of the loan. This has enabled our partners to make a portion of their development funds thus released available to the joint enterprise. As a result, this year IKR has accumulated a 1.3-billion-forint development fund from which we also hope to satisfy the most important machine requirements of our other farms.

[Question] Your most pressing problems seem to be easing. What possibilities are there for further development? From what you have said it appears that the most that these expected machine procurements will do is to provide better technical quality replacements for our superannuated machine park.

[Answer] Further development? Perhaps in the fourth phase of our Intensive Grain Production Program. And, of course, there will also be some as an indirect result of our upcoming machine replacements. The reason why we do not expect any earlier is because in the past few years our machine utilization has deteriorated due to superannuated equipment, a lack of spare parts, manpower shortages and, last but not least, poor work organization. If the new machines are allowed to operate in a more demanding organizational framework, our results can be expected to improve even further.

Hungarian Firms Also Submit Offers

With Credit from the World Bank

In the last decade we have had plenty of successes to report in grain production; our production averages have been close to and in some years have even exceeded the yields of the leading producer countries. During this period our genetic bases have continued to improve, more productive strains and hybrids have been introduced into general production, increasingly more effective insecticides have been put into use and, although with some balking, today soil conservation at most of our farms has reached the desired standard.

Production Averages

Average	1971-1975	1976-1980	1980	1981	1982
Wheat (kg/hectare)	3,320	4,060	4,760	4,000	4,390
Corn (kg/hectare)	4,170	4,850	5,320	5,860	6,850

The only problems we have experienced have been in the area of machine supplies. Because of our well-known economic difficulties, for years we have been unable to purchase large quantities of truly modern, high-performance tractors and combine-harvesters. Those which have come to our country instead, or the ones made here at home, have only seldom been suited for attaining wheat yields of over 5 tons per hectare or average corn yields of close to 8 tons. Our leading state farms have tried and will continue to try to keep their old machines in production; however, there are some American-made IH [International Harvester] tractors which, exceeding all realistic life expectency limits, have been in use for over 13 years. Successful operation of Soviet, Czechoslovak, Polish and especially East German power and labor-saving machines has for years been hindered by an increasingly chronic shortage of spare parts. The situation has been further aggrevated by the fact that many of these tractors and combine-harvesters have become worn out in every respect; hence keeping them in operation has meant parts requests and of course considerable expenditures that have gone beyond all reasonable economic limits.

	Average			
	1971-1975	1976-1980	1981	1982
Tractors (quantity)	65,052	57,996	55,452	54,912
Pulling power (Thousand kWs)	2,403	2,701	3,031	3,120

Recently the need for change has become imperative. In agricultural circles they have already begun--and with good reason--to talk about a depletion of production funds and have warned that unless the used machines are replaced by a specific date, we might as well start expecting a decline in our grain prodcution levels. The Intensive Grain Production Program launched during the present plan period is aiming to increase the amount of grain produced not by increasing the sowing areas but by improving yeilds. It was for this reason that last year, and also at the beginning of this year, there have already been some limited imports of medium- and high-performance tractors and grain harvesters from Western Europe and from overseas.

The really significant change, however, will come as a result of a credit contract which we have recently signed with the World Bank. This extremely favorable credit has not only improved the purchasing power of our agriculture but has also led to the announcement of a widely publicized competitive bidding--taking of offers--which until now has been unusual in Hungarian machine imports. The call for the submission of bid proposals was announced in April, even before the final signing of the credit agreement, in the World Bank bulletin. According to the announcement, offers were being accepted for delivering machine equipment to Hungary during the third phase of its Intensive Grain Production Program. The deliveries were expected to include heavy ploughing tractors of over 20 HP, universal tractors of 160 to 180 HP as well as attachable tilling and sowing machines, fresh fodder-harvesting machines and of course grain harvesters. Also participating in the competitive bidding--under equal terms--were some Hungarian firms. (Those who win are allowed to deliver machines to Hungarian agriculture, just as if they were fulfilling non-ruble-cleared export obligations.)

The bids were opened, with due ceremony, on the 10th of last month. Represented among the bidders was virtually every important agricultural machine manufacturer in the world, including John Deer, IHC, Claas, Fiat, Hesston, Laverda, Steyer and others, among them Raba and Mezogeptroszt. Altogether some 90 firms had submitted bids for several dozen types of machines. We should point out that the Hungarian offers were not a bit less attractive than those of the large international concerns.

This is also especially important because all countries belonging to the World Bank are eligible to submit offers for any project financed by special-purpose credits from the World Bank. In the unanimous opinion of the experts, the offers submitted by Raba and Mezogeptroszt were attractive enough to compete successfully at any foreign bidding.

Average	1971-1975	1976-1980	1981	1982
Combine-harvesters (quantity)	13,250	14,546	14,071	13,049

The offers were evaluated with the participation of experts from the World Bank. These evaluations are done on the basis of a point system worked out by a large technical staff, which ranks machines offered for delivery according to various technical parameters, work quality, fuel consumption and, last but not least, price.

Most of the offers submitted, incidentally, have also included discounts. Just to give you an example: the universal tractors that were delivered to us early this year under short-term enterprise credit constructions cost $39,000 each. Now under the World Bank's long-term credit construction the same firm is offering to sell us the same model for $29,000. There is certainly a lesson to be learned here for the future. Irrespective of the World Bank, before making any large-volume purchases it is expedient to announce widely publicized competitive biddings.

9379
CSO: 2500/440

NEW OFFICIAL ROLE OF 'NOT' PUBLICIZED

Council of Ministers Resolution

Warsaw RZECZPOSPOLITA in Polish 27 Jul 83 p 6

[Text] The Council of Ministers in Resolution No 65 of 6 June, on cooperation between the organs of the state administration and the Chief Technical Organization [NOT] and the scientific-technical organizations belonging to it, has recommended that our daily publish the text of the resolution and of the NOT Chief Council's declaration of 21 April 1983, on the activity on behalf of the economy and society of the NOT federation and the scientific-technical associations which belong to it. In the fulfillment of the Council of Ministers' recommendation, we publish both documents below.

Council of Ministers's Resolution No 65

The Council of Ministers accepts the NOT Chief Council's Declaration of 21 April 1983, defining the readiness of the NOT federation and the scientific-technical associations belonging to it, to act on behalf of the national economy and society.

Appreciating the knowledge, experience and social involvement of the engineers and technicians and their sills in elaborating and implementing the present as well as future programs of the socioeconomic development of People's Poland, and in order to assure the conditions of implementing the suggestions enclosed in the NOT Chief Council's Declaration, the Council of Ministers resolves the following:

1.1. The chief and central organs of state administration and the regional organs of state administration on the provincial level are obliged to cooperate with the NOT and the scientific-technical associations, hereafter called the "SNT," in the process of establishing and implementing the tasks resulting from the socioeconomic policy of the development of People's Poland.

2. In particular, within the framework of the cooperation cited in paragraph 1, use ought to be made of the initiatives enclosed in the NOT Chief Council's declaration of 21 April 1983 on the activity of the NOT and its SNT members on behalf of the economy and society.

2. Organs of state administration, cited in paragraph 1, cooperate with the NOT and SNT particularly with regard to:

1) the realization of the government anti-inflationary program for the years 1983-1985,

2) the execution of the decisions of the government savings program for the years 1983-1985, particularly with regard to savings of raw and other materials, energy and fuels,

3) wider utilization of local raw and waste materials,

4) participation in the implementation of the economic reform and in preparation of the projects for indispensable changes in the reform mechanisms,

5) the increase of social efficiency and work productivity in industry, construction, transportation and services,

6) implementation of the program for feeding the nation,

7) improvement in the quality and modernization of manufactured goods,

8) forecasting the development of technology in the country against the background of social and economic possibilities,

9) directing the scientific-research processes in accord with the present and future needs of the economy and improving the efficiency of the implementation processes and the popularization of innovations,

10) acting on behalf of better protection of the natural environment,

11) promoting exports, particularly of Polish technological thought and services, and acting toward the improvement of imports,

12) improving the qualifications of technical personnel and utilization of the knowledge and skills of engineers and technicians.

3. The organs of state administration, cited in paragraph 1, will assure:

1) the participation of the NOT and SNT in consultation on socioeconomic plans, mainly in the part of interest to the NOT and SNT, in accord with the resolution of 26 February 1982 on socioeconomic planning (DZIENNIK USTAW No 7, position 51), while in other questions--in accord with the regulations on social consultations and people's councils,

2) the involvement of NOT and SNT representatives as social advisers, experts and consultants in the preparation of documents and decisions regarding the issues cited in paragraph 1 resolution 2, and paragraph 2,

3) inviting NOT and SNT representatives to participate in councils active in the ministries and organs of state administration, cited in paragraph 1, in social assemblies and commissions on the issues of technology, management and economic progress,

4. In the process of carrying out the functions of the founding organs, the organs cited in paragraph 1 ought to note that the subordinate and supervised state organizational units cooperate with the appropriate NOT and SNT organs, particularly with regard to:

1) improving the utilization of materials and energy and the work-intensiveness of production,

2) improving the management and technology of manufacturing and of production quality,

3) technical supervision and work safety,

4) developing partnerlike cooperation with factory clubs of technology and improvement or with inventors, with regard to inventions and improvement activities, helping with the preparation and evaluation of projects, and with the implementation of these projects,

5) utilization of the equipment, laboratories, experimental stations, etc, owned by the organizational units and needed for the realization of the tasks cited in point 4.

5.1. The minister of culture and science will:

1) assure the development of NOT and SNT publishing activity by shortening the production cycle in publishing and printing houses and consider the possibility of allotting the publishing enterprises an appropriate amount of paper,

2) consider, in agreement with the finance minister, the possibility of helping the NOT in the formation of a specialized poligraphic enterprise for small edition publications,

3) establish the range and forms of aid to the NOT in the protection of monuments of technology around the country,

4) assure the NOT participation in the execution of social control over technological museum management in Poland.

2. The finance minister will:

1) issue on the suggestion of the NOT permission to open a bank account in foreign exchange, in accord with the regulations of the foreign exchange law,

2) provide money for the continuous operation of the NOT Museum of Technology in Warsaw, the Warszawa Metal Rolling Mill and the Oil Industry Museum in Bobrka, as well as for the acquisition of exhibits.

3) provide financial resources in the amount of 15 million a year to fund awards for outstanding achievements in technology.

3. The foreign trade minister, within the framework of his authority, will deliberate the granting to the NOT:

1) licenses for the export of services and other functions performed within the framework of statutory rights,

2) the right to the use of foreign exchange allowances earned from the export of services.

4, The minister of education, higher education anad technology, and the minister of culture and art will provide help in expanding the activity of the Council for the Technical Press and its conversion into the Council for Technical Literature.

6. The NOT and the SNT belonging to it can increase limited expenses connected with statutory activity from the personal and nonpersonal wages fund, expenses for business travel within the limits of the increased revenues from dues from persons in relation to the previous year and within the framework of revenues above the planned quota from persons as result of payments for services.

7.1. The NOT Chief Council is authorized to approve the budget estimates for domestic ventures organized by the NOT and its SNT members and to invite foreigners to participate in these ventures at the cost of the NOT and SNT.

2. The finance minister will establish the principles on which the costs of foreign trips connected with the statutory activity of the SNT members of the NOT can in part be financed from revenues defined in paragraph 6, with the utilization of foreign exchange owned by the members.

8. The Council of Ministers' Resolution No 180 of 20 August 1976, on the further development and improvement of the activity of the NOT and the scientific-technical organizations belonging to it, and the principles of their cooperation with state organizational institutions in the realization of the country's socioeconomic development, loses force (MONITOR POLSKI No 36 pos 159).

9. It is recommended that this resolution and the NOT Chief Council's declaration of 21 April 1983 on the activity of the NOT federation and its SNT members on behalf of the economy and society, be published in the daily, RZECZPOSPOLITA.

10. The resolution comes into effect with the date of the publication.

The Chairman of the Council of Ministers

J. Obodowski

Attention! This Resolution came into effect on 12 July 1983.

NOT Declaration

Warsaw RZECZPOSPOLITA in Polish 27 Jul 83 p 6

> [Text] Half a million engineers and technicians--members of the 20 scientific-technical associations belonging to the NOT federation have been contributing work and ideas to the solving of the basic problems of technology and economy in Poland. There is an urgent need and a possibility for intensifying the work and the social involvement of engineers and technicians in designing and implementing the programs of development of technology and of the whole economy, particularly in the present very difficult period of overcoming the socioeconomic crisis.

The 20th Congress of Polish Technicians has obliged us to undertake creative actions on behalf of renewing the national economy and fully realizing the suggestions of the congress, mainly with regard to:

--correct and effective realization of the economic reform,

--creating conditions for the development of scientific and technical progress,

--better utilization of technical personnel and technical thought.

The National Socioeconomic Plan for the years 1983-1985 and the government anti-inflationary and savings programs connected with it will become realistic and effective only if the mechanisms of the reform begin to function properly in enterprises. This depends in equal measure on the management of the enterprises, the central state administration, the proper definition of economic policy in regulations and resolutions, and actual economic practice in enterprises. Only then can we count on creative and effective work and its effects in accordance with social needs. We consider particularly important the intensification of activities on behalf of professional and social activization of all the associative links in enterprises, institutions and universities.

In the new conditions of the reform, with the active support of the management, workcrews and trade unions, and particularly the organs of self management, SNT cells in enterprises have a chance to undertake social initiatives and practical actions aimed at improving the efficiency of management, modernization of production, raising the quality of products, implementing new technical and organizational solutions, elaborating the enterprise savings programs,

etc. To this end it is necessary to raise the rank and value of good engineering work and better utilization not only of domestic raw materials and equipment, but above all, of domestic technology and technical thought. We consider this one of the most important factors in leading the country out of its crisis and achieving economic stability. Any actions supporting the government savings program will be of particular importance. We must display the greatest care in reducing the use of raw and other materials, fuels and energy per production unit in the modernization of products marked by low technical-exploitation parameters, and in the continuous reviewing of both ideas for inventions and ideas aimed at improvement, with the purpose of their speedy application to current production practice. The actions of the enterprise cells ought to be supported by the authority of the division boards and chief boards of the SNT. These issues ought to be a constant subject of interassociation business meetings organized by the provincial councils of the SNT and NOT. We must actively support creative technical and production initiatives. We have given and will continue to give concrete evidence that the scientific-technical milieus represented by the NOT federation are conscious of their tasks and duties which are part of the tasks and duties of the whole of the working community in our nation.

The creative activity and honest work of engineers and technicians are factors in achieving the economic balance of the state and improvement in the standard of living. The experience of the past years has shown that the social effort of the NOT and SNT cannot bring appropriate results unless it is supported and put into use by the state and the administrative and economic authorities. On the basis of these assumptions, the NOT Chief Council is submitting to the Government of the Polish People's Republic its plans for the direction of the NOT and SNT, deriving from their statutes and from the resolutions of the 20th Congress of Polish Technicians, and is appealing for the acceptance of these plans and for help in creating conditions which would bring about their realization.

The NOT and the scientific-technical associations belonging to it will:

1. Concentrate their work on

1) strengthening the atmosphere of involvement and strengthening creative professional attitudes in the technical milieu and on promoting the conditions for mass participation in the realization of the development of the economy and technology,

2) improving the qualifications of technical personnel and on activities promoting a full utilization of the knowledge and skills of engineers and technicians,

3) modernizing and improving the quality of manufactured products, increasing their reliability, functionality and durability and continuously improving production methods,

4) designing facilities and saving materials, energy and the means of transportation, modernizing the structure of the utilization of materials through

the development of materials engineering and the elaboration and implementation of materials and energy saving technologies,

5) increasing social efficiency and work efficiency, developing better mechanization and work automation in industry, construction, transport, agriculture, forestry and services,

6) focusing the attention of the technical milieus on the realization of the tasks of technical progress concerning greater efficiency for the economy by speeding up the development of technology in enterprises, branches, and the whole of the national economy,

7) utilizing better the means of production, searching for and managing the reserves available in permanent material wealth, and increasing the forces of production through modernization,

8) orientating the research processes in accordance with the present and future needs of the economy and improvement in the efficiency of the implementation processes and popularization of innovations,

9) extending actions promoting more rational formation and protection of the natural environment,

10) popularizing and promoting exports, particularly Polish technical thought and services abroad, and of activities promoting improved imports,

11) advising and consulting in the field of economy, science and technology,

12) stimulating the development of inventions and improvements,

13) services in the field of technology and its applications.

2. They will undertake actions aimed at:

1) increasing the activity of SNT and NOT in enterprises and assuring their continuous cooperation with workers councils and management, in an attempt at a fuller utilization of the industrial and service-providing potential of enterprises,

2) organizing an active exchange of experiences and disseminating information on questions of technique and technology between enterprises by utilizing mutual contacts between enterprise and regional cells of the NOT and SNT,

3) promoting possibilities for the NOT and SNT cells in enterprises with regard to elaborating and submitting justified technical and organizational suggestions serving the fuller utilization of machinery and equipment, tools and the production of nonstandard spare parts, and better utilization of energy and fuels and raw and other materials,

4) increasing partnerlike cooperation between NOT and SNT cells in enterprises and the Enterprise Clubs of Technology and Improvement, and obtaining their help above all in regard to determining the subject for inventions and improvements, technical counseling and implementation.

3. They will prepare, by using evaluating and counseling organs--on their own initiative or on the order of the organs of state--professional reports, expert appraisals and analyses in specified fields of technology and economy. In particular, the NOT and SNT are willing to undertake or intensify actions regarding:

1) the preparation of forecasts of technological development in the country against the background of social needs and economic possibilities,

2) the preparation of methods assuring full utilization of the country's present industrial potential and determining the conditions concected with it,

3) the evaluation of the implementation of the economic reform and its results and drawing conclusions regarding indispensable changes in the mechanisms of the reform,

4) the preparation of further conclusions regarding the state's scientific-technical policy, including the evaluation of the most advantageous number of persons and level of technical education in the aspect of the country's socioeconomic needs,

5) improving the personnel and formation of the civic consciousness of engineers and technicians and the integration of the engineering-technical cadres around the professional and socioeconomic problems. In order to achieve full and effective realization of the pledges and aims enclosed in this declaration, we need the cooperation and help of the organs of state and economic administration. The Chief Technical Organization asks the Government of the Polish People's Republic to make a decision and issue appropriate regulations assuring such cooperation and help.

Chief Council, Chief Technical Organization [NOT]

Chairman, Prof Dr Habilitatus Janusz Szosland

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13 OCT. 1983